



Crystal Hexagon

(Portuguese Version)

by Arya Akhavan (August 2013)

Angles for R.I. = 1.610

115 + 18 girdles = 133 facets

6-fold, mirror-image symmetry

96 index

L/W = 1.096 T/W = 0.365 U/W = 0.316

P/W = 0.534 C/W = 0.228

Vol./W³ = 0.298

PREFORM

| | | | |
|----|--------|-------------------------------------|------------------------|
| X1 | 41.57° | 08-24-40-56-72-88 | Cut to centerpoint. |
| X2 | 39.95° | 04-12-20-28-36-44-52-60-68-76-84-92 | Meet at preform culet. |
| G1 | 90.00° | 08-24-40-56-72-88 | Set stone size. |
| G2 | 90.00° | 04-12-20-28-36-44-52-60-68-76-84-92 | Level girdle. |

PAVILION

| | | | |
|----|--------|-------------------------------------|----------------------|
| G1 | 90.00° | 08-24-40-56-72-88 | Retain from preform. |
| G2 | 90.00° | 04-12-20-28-36-44-52-60-68-76-84-92 | Retain from preform. |
| P1 | 68.63° | 08-24-40-56-72-88 | Set girdle level. |
| P2 | 53.00° | 04-12-20-28-36-44-52-60-68-76-84-92 | Level girdle. |
| P3 | 47.03° | 96-16-32-48-64-80 | Meet G2, P2 |
| P4 | 46.03° | 04-12-20-28-36-44-52-60-68-76-84-92 | Meet P1, P2 |
| P5 | 44.04° | 03-13-19-29-35-45-51-61-67-77-83-93 | Meet P2, P3, P4 |
| P6 | 42.50° | 02-14-18-30-34-46-50-62-66-78-82-94 | Meet P3, P5 |

CROWN

| | | | |
|----|--------|-------------------------------------|-------------------|
| C1 | 50.49° | 08-24-40-56-72-88 | Set girdle width. |
| C2 | 40.62° | 04-12-20-28-36-44-52-60-68-76-84-92 | Level girdle. |
| C3 | 35.00° | 96-16-32-48-64-80 | Meet G2, C2 |
| C4 | 30.11° | 06-10-22-26-38-42-54-58-70-74-86-90 | Meet C1, C2 |
| C5 | 25.16° | 03-13-19-29-35-45-51-61-67-77-83-93 | Meet C2, C3, C4 |
| C6 | 19.67° | 08-24-40-56-72-88 | Meet C4, C5 |
| T | 0.00° | Table | Meet C5, C6 |

For some bizarre reason, I wanted to recreate the Portuguese effect in a hexagon, but without using the typical Portuguese pavilion pattern. The effect is surprisingly similar. Try frosting P5, C2, C4, and C6 for an interesting look! Works in materials from quartz to rutile (RI = 1.54 - 2.62) with no changes, but looks best in icy topaz.

Suggested size = 10-30 mm

C:\Users\ARYADE~1\Pictures\DESIGN~1\WORKSI~1\Done\1CRYST~1.GEM